

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 00-053-PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT IPEA 416)	
International application No. PCT JP00 06686	International filing date (day month year) 28 September 2000 (28.09.00)	Priority date (day month year) 30 September 1999 (30.09.99)
International Patent Classification (IPC) or national classification and IPC C12N 15 11, 15 10, A01K 67 027, A61K 48 00		
Applicant SAITO, Izumu		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36
2. This REPORT consists of a total of 3 sheets, including this cover sheet
- ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and or drawings which have been amended and are the basis for this report and or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT)

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 13 February 2001 (13.02.01)	Date of completion of this report 06 November 2001 (06.11.2001)
Name and mailing address of the IPIA JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No

PCT JP00 06686

I. Basis of the report

1. With regard to the **elements** of the international application: *

- ☒ the international application as originally filed
- ☐ the description.
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

- ☐ the claims
 pages _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

- ☐ the drawings
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

- ☐ the sequence listing part of the description
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing

- ☐ contained in the international application in written form.
- ☒ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☒ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets fig. _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)) **

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP 01/06646

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement

1 Statement

Novelty (N)	Claims	1-20	YES
	Claims		NO
Inventive step (IS)	Claims	1-20	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims		NO

2 Citations and explanations

Document 1: T. Schlake et al., "Use of mutated FLP recognition target FRT sites for the exchange of expression cassettes at defined chromosomal loci", Biochemistry, 1994, Nov. 1, 33 (43), pp. 12746-51

Claims 1-20

Document 1 discloses variant FRT with a mutation introduced into a spacer region, and recombination of an expression region using said mutant FRT. However, it does not mention specific variant sequences f2161, f2151, f2262 and f81, and the practical effect of these specified mutant sequences in causing recombination between variant sequences could not be predicted from Document 1. Nor is it possible to predict the effect of variant sequence f72 in bringing about highly efficient recombination between variant sequences.

Therefore, the inventions set forth in the above claims involve an inventive step relative to the documents cited in the international search report.